September 18, 2002

1420 East 6th Ave. P.O. Box 200701 Helena, MT 59620-0701

Environmental Quality Council

Montana Department of Environmental Quality

Montana Department of Fish, Wildlife and Parks

Fisheries Division

Endangered Species Coordinator

Native Species Coordinator, Fisheries

Missoula Office

Montana State Library, Helena

MT Environmental Information Center

Montana Audubon Council

Missoula County Conservation District, 5115 Highway 93 So

Missoula County Conservation District, 5115 Highway 93 South, Missoula, MT 59801 U.S. Army Corp of Engineers, Helena U.S. Fish and Wildlife Service, Helena

State Historic Preservation Office, Helena

The Moy Family, 6100 Marshall Canyon Road, Missoula, MT 59802 Plum Creek Timber Company, 140 North Russell, Missoula, MT 59801

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for a Future Fisheries Project tentatively planned to add large woody debris to a 1.25 mile section of Marshall Creek. Project intent is to increase habitat complexity and enhance a westslope cutthroat trout population. Marshall Creek is a small tributary to the Clark Fork River located about 3.5 miles east of Missoula. The proposed project is located on property owned by the Moy family and by Plum Creek Timber Company.

Please submit any comments that you have by 5:00 P.M., October 18, 2002 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Completion of this project is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432.

Sincerely,

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
e-mail: mlere@state.mt.us

ENVIRONMENTAL ASSESSMENT

Fisheries Division
Montana Fish, Wildlife and Parks
Marshall Creek Instream Habitat Enhancement Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 that directs the Department to administer a Future Fisheries Improvement Program. The program involves physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. Additionally, the 1999 Montana Legislature amended statute sections 87-1-273, 15-38-202 and Section 5, Chapter 463, Laws of 1995 to create a bull trout and cutthroat trout enhancement program. The program calls for the enhancement of bull trout and cutthroat trout through habitat restoration, natural reproduction and reductions in species competition by way of the Future Fisheries Program.

This project is being proposed to increase instream habitat complexity in Marshall Creek by adding large woody debris. Marshall Creek, a small tributary that enters the Clark Fork River approximately 3.5 miles east the city of Missoula, supports a population of westslope cutthroat trout. The addition of wood is intended to increase habitat diversity and increase densities of westslope cutthroat trout. The project site is located on property owned by the Moy family and by Plum Creek Timber Company (Attachment 1).

- I. <u>Location of Project</u>: This project will be conducted on Marshall Creek located approximately 3.5 miles east of the city of Missoula within Township 13 North, Range 18 West, Sections 6 and 7 in Missoula County.
- II. <u>Need for the Project</u>: One goal within Montana Fish, Wildlife and Parks six-year plan of operation for the fisheries program is to "restore and enhance degraded habitat" by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on public and private lands. This proposed project would help achieve this goal.

Marshall Creek is a productive second order stream that appears to be far below it's potential for supporting fish populations due to historic land management practices and poor design on road crossings. The stream displays poor diversity in aquatic habitat due to past removal of large woody debris from the channel and from timber harvest in the riparian areas. A recent survey revealed that 96% of the stream length is comprised of riffle and the channel only contains 2.3 pieces of woody debris per 1,000 feet of stream. Riparian areas are now slowly recovering, but it will be decades before more large woody debris is naturally recruited to the stream. Large woody debris contributes to the formation of diverse aquatic habitat where westslope cutthroat trout thrive.

III. Scope of the Project:

This project calls for transporting and placing approximately 150 trees greater than eight inches in diameter into two reaches of Marshall Creek to improve fish habitat. Reach 1 is a 0.50-mile section located on the Moy property and reach 2 is a 0.75-mile section located on Plum Creek Timber property. The trees will be placed in a random fashion in various hydraulically stable orientations over the 1.25-mile section of stream using an all-terrain excavator. The woody debris will be placed approximately every 4 to 6 channel widths to mimic the distribution consistent with pool frequencies for this channel type. The

trees will be provided by Plum Creek Timber Company. This project is a third in a series of at least four projects that are intended to enhance the westslope cutthroat trout population in Marshall Creek. The project is expected to cost \$16,850.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$8,350.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

In small streams, westslope cutthroat trout densities are commonly related to complex aquatic habitat created by the abundance of large woody debris. The addition of trees into Marshall Creek is expected to increase the complexity of habitat found in the stream, leading to a greater carrying capacity for resident and fluvial fish. Marshall Creek provides some recruitment of westslope cutthroat trout to the Clark Fork River. Ultimately, once a fourth phase restores fish passage near the confluence, this project is expected to improve the fluvial component of the westslope cutthroat trout population and enhance recruitment to the river.

2. Water quantity, quality and distribution.

Short-term increases in turbidity may occur during project construction. To minimize turbidity, construction will occur during a low flow period and operation of equipment in the stream channel will be minimized to the extent practicable. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota. A 124 permit (Stream Protection Act) will be obtained from Montana Fish, Wildlife and Parks and the U.S. Army Corp of Engineers will be contacted for requirements needed to meet the federal Clean Water Act (404 permit).

3. Geology and soil quality, stability and moisture.

Soils along the stream margin would be disturbed during the installation of trees into the channel. Due to a light footprint, the use of an all-terrain excavator should minimize this disturbance.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover would be disturbed during the period of construction. The use of an all-terrain excavator would act to minimize these disturbances.

5. Aesthetics.

Aesthetics would be negatively affected during project construction because of ground disturbance and the presence of heavy equipment. These negative effects would be short term since the project is expected to be completed in approximately 7 days.

7. Unique, endangered, fragile, or limited environmental resources.

Westslope cutthroat trout are native to Montana and are classified as a "species of special concern" because of their declining numbers and shrinking distribution. This project is expected to enhance habitat diversity in Marshall Creek and increase the carrying capacity for a population of westslope cutthroat trout.

9. Historic and archaeological sites

The proposed project may require an individual Army Corp of Engineers 404 permit. Therefore, the State Historic Preservation Office has been contacted to determine the need for compliance with the federal historic preservation regulations. The project will not begin until a cultural clearance is granted.

VI. Explanation of Impacts on the Human Environment.

7. Access to & quality of recreational activities.

This proposed project is expected to enhance the carrying capacity of westslope cutthroat trout in Marshall Creek and should enhance recruitment of these fish to the Clark Fork River.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, Marshall Creek will continue to slowly recover from the effects of historic land management practices. The recruitment of large woody debris to the channel and the creation of a more diverse aquatic habitat will likely take decades. The population of westslope cutthroat trout in Marshall Creek will remain limited due to the continued lack of habitat diversity.

2. The Proposed Alternative

The proposed alternative is designed to increase aquatic habitat complexity in Marshall Creek by adding large woody debris to the stream channel. The density of westslope cutthroat trout is expected to increase as a result of this proposal. Ultimately, once fish passage near the mouth of the stream is re-established, this project is expected to enhance the fluvial component of the cutthroat trout population in Marshall Creek. Fish passage restoration will be addressed in a proposed future phase for enhancing Marshall Creek.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and will be contingent upon their approval. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA also will be published on Montana Fish, Wildlife and Parks web page: fwp.state.mt.us.

3. Duration of comment period?

Public comment will be accepted through 5 PM on October 18, 2002.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
Montana Department of Fish, Wildlife and Parks
1420 East 6th Avenue, Helena, MT 59620
Telephone: (406) 444-2432

e-mail: mlere@state.mt.us

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701 (406) 444-2535

ENVIRONMENTAL ASSESSMENT

Project Title Marshall Creek Instream Habitat Enhancement Project

Division/Bureau Fisheries Division-Future Fisheries Improvement
Description of Project This project is being proposed to increase
habitat complexity in Marshall Creek, a small tributary to the Clark
Fork River, by adding large woody debris to the stream channel. The
addition of wood to the channel is intended to enhance the population
of westslope cutthroat trout in the stream. The project site is located
approximately 3.5 miles east of the city of Missoula on property owned
by the Moy family and by Plum Creek Timber Company.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats			Х	g* 150	in Gran	Х
2. Water quality, quantity & distribution			Х			Х
3. Geology & soil quality, stability & moisture			Х			Х
4. Vegetation cover, quantity & quality			Х			Х
5. Aesthetics			Х			Х
6. Air quality				х		
7. Unique, endangered, fragile, or limited environmental resources			Х			Х
8. Demands on environmental resources of land, water, air & energy				х		
9. Historical & archaeological sites				Х		Х

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

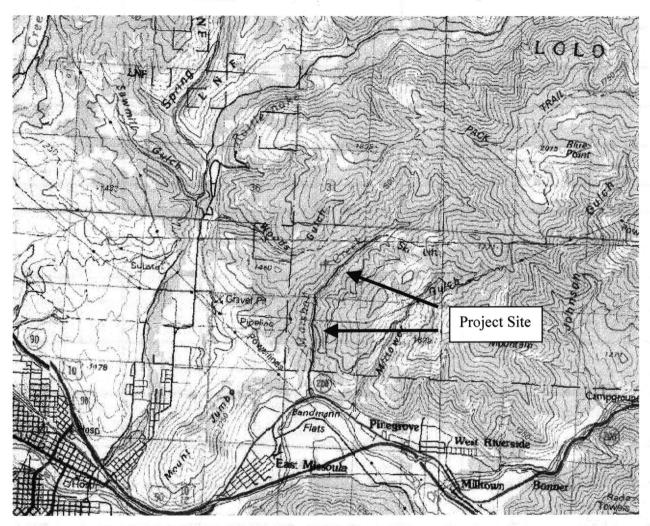
POTENTIAL IMPACTS OF	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				х		
2. Cultural uniqueness & diversity				Х		
3. Local & state tax base & tax revenue				Х		
4. Agricultural or industrial production				Х		
5. Human health				Х		
6. Quantity & distribution of community & personal income				х		
7. Access to & quality of recreational and wilderness activities			х			х
8. Quantity & distribution of employment		7		Х		
9. Distribution & density of population & housing				Х		
10. Demands for government services				х		
11. Industrial & commercial activity				х		
12. Demands for energy		4 gra, 1 14		X		g Milliam Magaz
13. Locally adopted environmental plans & goals			X			х
14. Transportation networks & traffic flows				Х		

Other groups or agencies contacted or which may have overlapping jurisdiction <u>Missoula County Conservation District</u>, <u>US Fish and Wildlife Service</u>, <u>US Army Corp of Engineers</u>, <u>Montana Department of Environmental Quality</u>, <u>State Historic Preservation Office</u>
Individuals or groups contributing to this EA <u>Ladd Knotek</u>, <u>Montana</u>

Fish, Wildlife and Parks

Recommendation concerning preparation of EIS No EIS required.

EA prepared by: Mark Lere Date: September 18, 2002



Attachment 1. Map showing project location on Marshall Creek.